

FortiGate® 7000E Series Solution

FortiGate 7040 Bundles

The Fortinet Enterprise Firewall Solution delivers end-to-end network security with one platform, one network security operating system and unified policy management with a single pane of glass — for **the industry's best protection against the most advanced security threats and targeted attacks.**



Security Fabric Integration

FortiGate appliances, interconnected with the Fortinet Security Fabric, form the backbone of the Fortinet Enterprise Solution.



315 Gbps
Firewall

160 Million
Concurrent Sessions



60 Gbps
IPS



50 Gbps
NGFW



40 Gbps
Threat Protection



Multiple 10 GE SPF+, 40 GE QSPF and/or 100 GE CFP2 slots



Deployment Modes

Next Generation Firewall
Internal Segmentation Firewall
Data Center Firewall



Hardware Acceleration

SPU CP9 and NP6



Third-Party Certifications



DEPLOYMENT

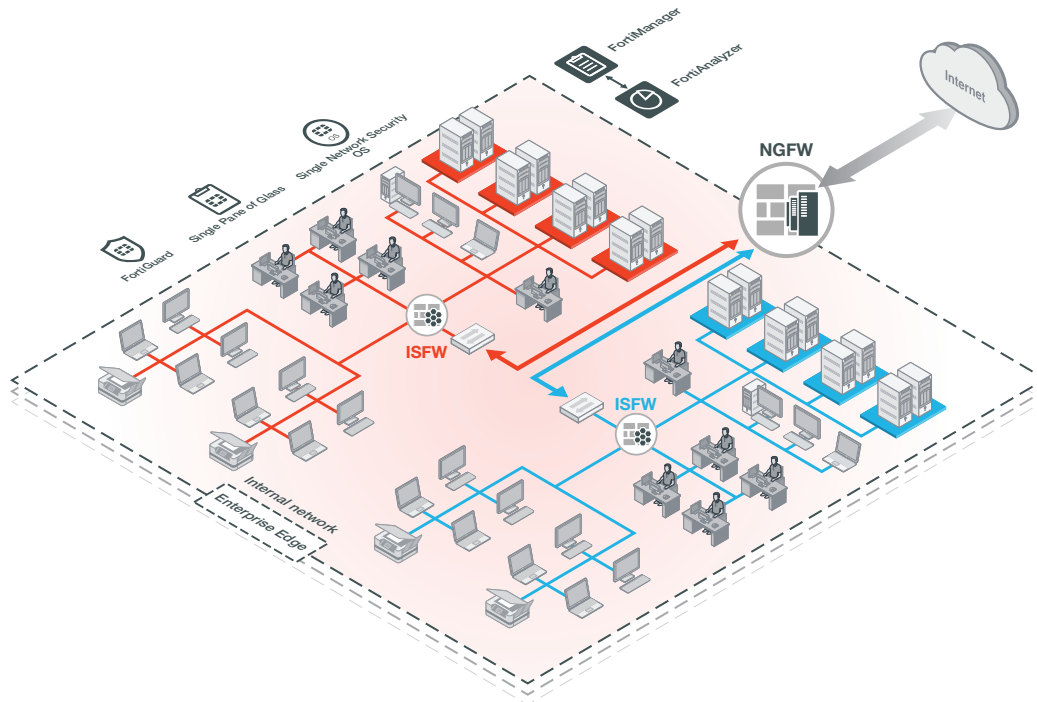


Figure 1: FortiGate 7000 Series deployment in large campus networks (NGFW, ISFW)

Next Generation Firewall (NGFW)

- Internet gateway for large enterprises
- Consolidated next generation firewall and advanced threat protection services
- Fastest application layer processing engine for encrypted SSL and VPN traffic.

Internal Segmentation Firewall (ISFW)

- Custom ASIC powered LAN speeds and ultra-low latency
- Visibility and protection for internal segments
- Higher port density to protect multiple assets; integrated switch
- Layered protection with firewall, application access and control, IPS (intrusion prevention system) and ATP (advanced threat protection)
- Rapid deployment — near zero configuration.

Data Center Firewall (DCFW)

- High availability, high throughput and low latency for data center edge and core
- High session scale for accommodating large network and user traffic for internet and cloud facing data centers
- Real-time threat intelligence and advanced protection from external and internal threats, stopping cyber criminals, malware and unauthorized use.

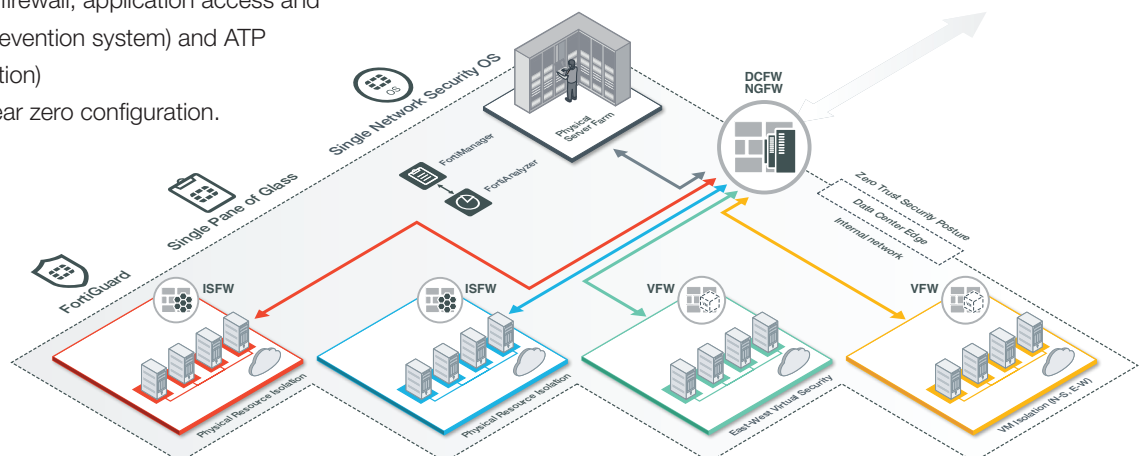
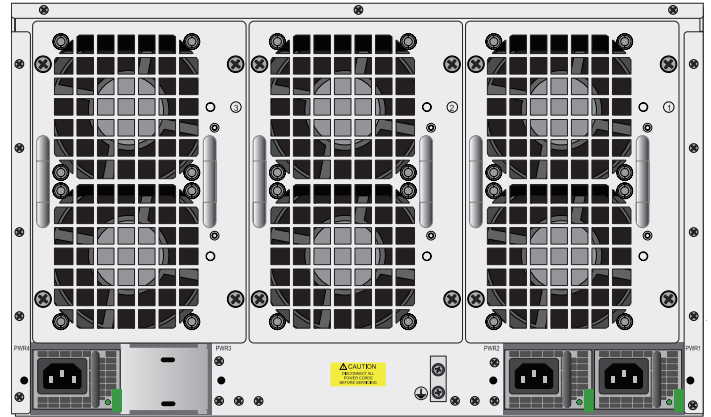
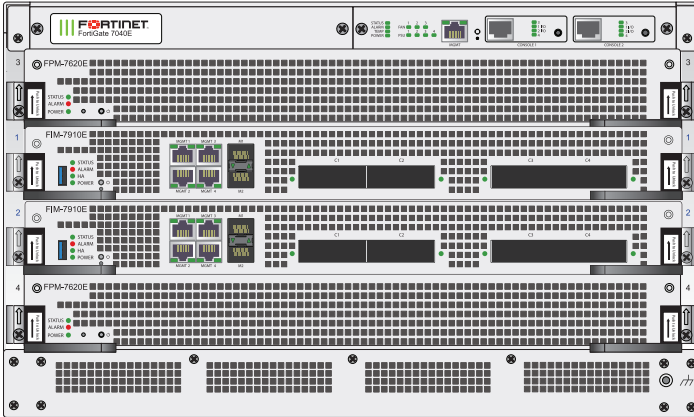


Figure 2: FortiGate 7000 Series deployment in data center (DCFW/NGFW, ISFW)

SYSTEM

FortiGate 7040E

Next Generation 6U 19-inch 4-slot rack mount chassis with Fortinet Processor Modules (FPM) and Fortinet Interface Modules (FIM).



FORTIGATE 7040E	
Hardware Specifications	
Module Slots	4
Shelf Manager	1
System Performance and Capacity	
Firewall Throughput (1518 / 512 / 64 byte, UDP)	315 / 310 / 200 Gbps
Firewall Latency (64 byte, UDP)	7 µs
Firewall Throughput (Packet per Second)	330 Mpps
Concurrent Sessions (TCP)	160 Million
New Sessions/Sec (TCP)	950,000
Firewall Policies	200,000
IPsec VPN Throughput (512 byte)	100 Gbps
Gateway-to-Gateway IPsec VPN Tunnels	40,000
Client-to-Gateway IPsec VPN Tunnels	64,000
SSL-VPN Throughput	NA
Concurrent SSL-VPN Users (Recommended Maximum)	NA
IPS Throughput (HTTP / Enterprise Mix) ¹	140 / 60 Gbps
SSL Inspection Throughput ²	50 Gbps
Application Control Throughput ³	80 Gbps
NGFW Throughput ⁴	50 Gbps
Threat Protection Throughput ⁵	40 Gbps
CAPWAP Throughput ⁶	NA
Virtual Domains (Default / Maximum)	10 / 500
Maximum Number of FortiAPs (Total / Tunnel Mode)	NA
Maximum Number of FortiTokens	5,000
Maximum Number of Registered FortiClients	20,000
High Availability Configurations	Inter-Chassis – Active-Passive and Active-Active
Dimensions	
Height x Width x Length (inches)	10.4 x 17.3 x 25.6
Height x Width x Length (cm)	264 x 440 x 650
Weight	90.3 lbs (41 kg)

SYSTEM

FORTIGATE 7040E	
Power and Environment	
Power Required	AC (configured with 3 PS by default, optionally an additional PS can be added for redundancy)
Power Consumption (Maximum / Average) *	2500 / 1800 W
Heat Dissipation (Maximum) *	8,530 BTU/h
Operating Temperature	32–104°F (0–40°C)
Storage Temperature	-13–158°F (-25–70°C)
Humidity	20–90% non-condensing
Compliance	
Certifications	FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB

* Based on all default included components.

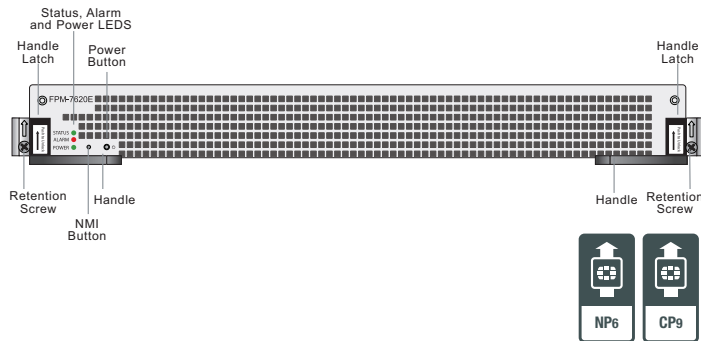
Note: All performance values are "up to" and vary depending on system configuration. IPsec VPN performance is based on 512 byte UDP packets using AES-256+SHA1. 1. IPS performance is measured using 1 Mbyte HTTP and Enterprise Traffic Mix. 2. SSL Inspection is measured with IPS enabled and HTTP traffic, using TLS v1.2 with AES256-SHA. 3. Application Control performance is measured with 64 Kbytes HTTP traffic. 4. NGFW performance is measured with IPS and Application Control enabled, based on Enterprise Traffic Mix. 5. Threat Protection performance is measured with IPS and Application Control and Malware protection enabled, based on Enterprise Traffic Mix. 6. CAPWAP performance is based on 1444 byte UDP packets.

For complete, up-to-date and detailed feature set, please refer to the Administration Handbook and FortiOS Datasheet.

MODULES

Fortinet Processor Module 7620E

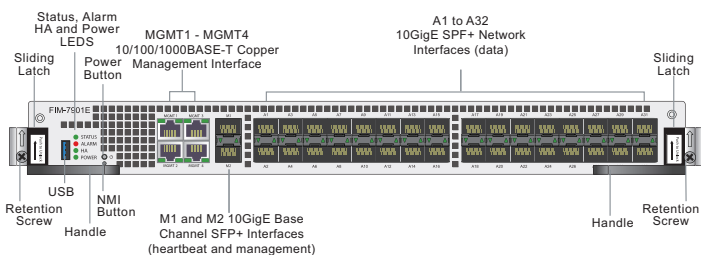
Latest purpose-built SPU CP9 accelerated processor module with superior content processing throughput and protection. Runs on FortiOS 5 — the most powerful security operating system in the world.



FPM-7620E	
Power and Environment	
Power Consumption (Average / Maximum)	320 / 410 W
Heat Dissipation (Average)	1,395 BTU/h
Operating Temperature	32–104°F (0–40°C)
Storage Temperature	-13–158°F (-25–70°C)
Humidity	20–90% non-condensing
Compliance	
Certifications	FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB
NEBS Certified	—

Fortinet Interface Module 7901E

High performance, SPU DP2 accelerated networking blade with 32x GE/10 GE SFP/+ slots.

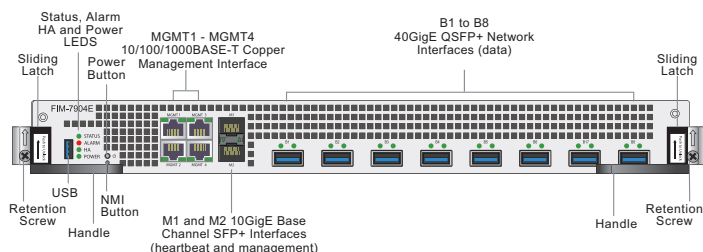


FIM-7901E	
Interfaces	
Network Interfaces	32x GE/10 GE SFP/+
Base Channel Interfaces	2x 10 GE SFP+
Management Interfaces	4x GE RJ45
Included Transceivers	2x SFP+ SR
Power and Environment	
Power Consumption (Average / Maximum)	260 / 450 W
Heat Dissipation	1531 BTU/h
Operating Temperature	32–104°F (0–40°C)
Storage Temperature	-13–158°F (-25–70°C)
Humidity	20–90% non-condensing
Compliance	
Certifications	FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB
NEBS Certified	—

MODULES

Fortinet Interface Module 7904E

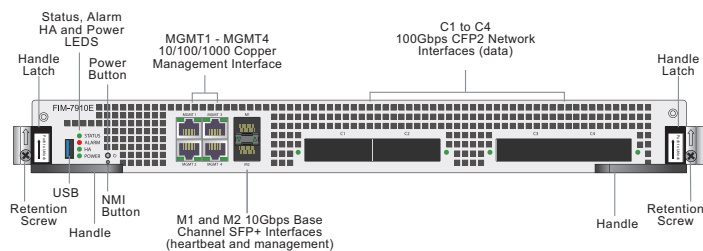
High performance, SPU DP2 accelerated networking blade with 8x 40 GE QSFP+ slots.



FIM-7904E	
Interfaces	
Network Interfaces	8x 40 GE QSFP+
Base Channel Interfaces	2x 10 GE SFP+
Management Interfaces	4x GE RJ45
Included Transceivers	2x SFP+ SR
Power and Environment	
Power Consumption (Average / Maximum)	260 / 450 W
Heat Dissipation	1531 BTU/h
Operating Temperature	32–104°F (0–40°C)
Storage Temperature	-13–158°F (-25–70°C)
Humidity	20–90% non-condensing
Compliance	
Certifications	FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB

Fortinet Interface Module 7910E

High performance, SPU DP2 accelerated networking blade with 4x 100 GE CFP2 slots.

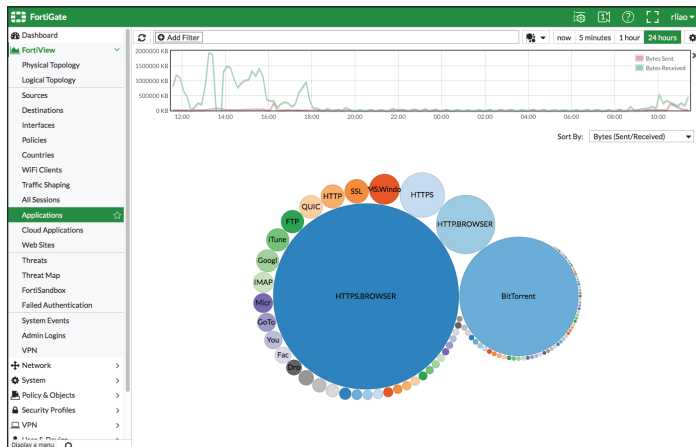


FIM-7910E	
Interfaces	
Network Interfaces	4x 100 GE CFP2
Base Channel Interfaces	2x 10 GE SFP+
Management Interfaces	4x GE RJ45
Included Transceivers	2x SFP+ SR
Power and Environment	
Power Consumption (Average / Maximum)	260 / 450 W
Heat Dissipation	1531 BTU/h
Operating Temperature	32–104°F (0–40°C)
Storage Temperature	-13–158°F (-25–70°C)
Humidity	20–90% non-condensing
Compliance	
Certifications	FCC, ICES, CE, RCM, VCCI, BSMI, UL/cUL, CB

SOFTWARE

FortiOS

Control all the security and networking capabilities across the entire FortiGate platform with one intuitive operating system. Reduce operating expenses and save time with a truly consolidated next generation security platform.



- A truly consolidated platform with one OS for all security and networking services for all FortiGate platforms.
- Industry-leading protection: NSS Labs Recommended, VB100, AV Comparatives and ICSA validated security and performance.
- Control thousands of applications, block the latest exploits, and filter web traffic based on millions of real-time URL ratings.
- Detect, contain and block advanced attacks automatically in minutes with integrated advanced threat protection framework.
- Solve your networking needs with extensive routing, switching and WAN capabilities.
- Activate all the SPU-booster capabilities you need on the fastest firewall platform available.



For more information, please refer to the FortiOS data sheet available at www.fortinet.com

SERVICES

FortiGuard™ Security Services

FortiGuard Labs offers real-time intelligence on the threat landscape, delivering comprehensive security updates across the full range of Fortinet's solutions. Comprised of security threat researchers, engineers, and forensic specialists, the team collaborates with the world's leading threat monitoring organizations, other network and security vendors, as well as law enforcement agencies:

- **Real-time Updates** — 24x7x365 Global Operations research security intelligence, distributed via Fortinet Distributed Network to all Fortinet platforms.
- **Security Research** — FortiGuard Labs have discovered over 170 unique zero-day vulnerabilities to date, totaling millions of automated signature updates monthly.
- **Validated Security Intelligence** — Based on FortiGuard intelligence, Fortinet's network security platform is tested and validated by the world's leading third-party testing labs and customers globally.

FortiCare™ Support Services

Our FortiCare customer support team provides global technical support for all Fortinet products. With support staff in the Americas, Europe, Middle East and Asia, FortiCare offers services to meet the needs of enterprises of all sizes:

- **Enhanced Support** — For customers who need support during local business hours only.
- **Comprehensive Support** — For customers who need around-the-clock mission critical support, including advanced exchange hardware replacement.
- **Advanced Services** — For global or regional customers who need an assigned Technical Account Manager, enhanced service level agreements, extended software support, priority escalation, on-site visits and more.
- **Professional Services** — For customers with more complex security implementations that require architecture and design services, implementation and deployment services, operational services and more.



Enterprise Bundle

FortiGuard Labs delivers a number of security intelligence services to augment the FortiGate firewall platform. You can easily optimize the protection capabilities of your FortiGate with the FortiGuard Enterprise Bundle. This bundle contains the full set of FortiGuard security services plus FortiCare service and support offering the most flexibility and broadest range of protection all in one package.

BUNDLE MATRIX

SKU	COMPONENTS				
Bundle	Chassis	Processing Module	I/O Module 1	I/O Module 2	Services
FG-7040E-1	FG-7040E*	2x FPM-7620E	FIM-7901E	FIM-7901E	Chassis-based pricing — Individual and bundled FortiGuard security services and support subscription services: UTM Bundle, Enterprise Bundle and FortiCare360
FG-7040E-2	FG-7040E*	2x FPM-7620E	FIM-7904E	FIM-7904E	
FG-7040E-3	FG-7040E*	2x FPM-7620E	FIM-7910E	FIM-7910E	
FG-7040E-4	FG-7040E*	2x FPM-7620E	FIM-7901E	FIM-7904E	
FG-7040E-5	FG-7040E*	2x FPM-7620E	FIM-7901E	FIM-7910E	
FG-7040E-6	FG-7040E*	2x FPM-7620E	FIM-7904E	FIM-7910E	

* Not sold separately

ORDER INFORMATION

BUNDLE ITEMS	SKU	DESCRIPTION
FortiGate 7040E-1 Bundle	FG-7040E-1	6U 4-slot chassis with 2x FPM-7620E processing modules, 2x FIM-7901E modules with 64x 10 GE SFP+ slots total, 1x manager module, and 3x hot swappable redundant PSU.
FortiGate 7040E-2 Bundle	FG-7040E-2	6U 4-slot chassis with 2x FPM-7620E processing modules, 2x FIM-7904E modules with 16x 40 GE QSFP+ slots total, 1x manager module, and 3x hot swappable redundant PSU.
FortiGate 7040E-3 Bundle	FG-7040E-3	6U 4-slot chassis with 2x FPM-7620E processing modules, 2x FIM-7910E I/O module with 8x 100 GE CFP2 slots total, 1x manager module, and 3x hot swappable redundant PSU.
FortiGate 7040E-4 Bundle	FG-7040E-4	6U 4-slot chassis with 2x FPM-7620E processing modules, 1x FIM-7901E module with 32x 10 GE SFP+ slots, 1x FIM-7904E module with 8x 40 GE QSFP+ slots, 1x manager module, and 3x hot swappable redundant PSU.
FortiGate 7040E-5 Bundle	FG-7040E-5	6U 4-slot chassis with 2x FPM-7620E processing modules, 1x FIM-7901E module with 32x 10 GE SFP+ slots, 1x FIM-7910E module with 4x 100 GE CFP2 slots, 1x manager module, and 3x hot swappable redundant PSU.
FortiGate 7040E-6 Bundle	FG-7040E-6	6U 4-slot chassis with 2x FPM-7620E processing modules, 1x FIM-7904E module with 8x 40 GE QSFP+ slots, 1x FIM-7910E module with 4x 100 GE CFP2 slots, 1x manager module, and 3x hot swappable redundant PSU.
OPTIONAL / SPARE ITEMS	SKU	DESCRIPTION
Processing Module		
FPM-7620E Module	FPM-7620E	Hot swappable processing module for 7000E series — SPU NP6 and CP9 hardware accelerated.
I/O Module		
FIM-7901E Module	FIM-7901E	Hot swappable I/O module for 7000E series — 4x GE RJ45 Management ports and 34x 10 GE SFP+ slots.
FIM-7904E Module	FIM-7904E	Hot swappable I/O module for 7000E series — 4x GE RJ45 Management ports, 2x 10 GE SFP+ slots and 8x 40 GE QSFP+.
FIM-7910E Module	FIM-7910E	Hot swappable I/O module for 7000E series — 4x GE RJ45 Management ports, 2x 10 GE SFP+ slots and 4x 100 GE CFP2 slots.
Transceivers		
100 GE CFP2 Transceivers, Short Range	FG-TRAN-CFP2-SR10	100 GE CFP2 transceivers, 10 channel parallel fiber, short range for all systems with CFP2 slots.
100 GE CFP2 Transceivers, Long Range	FG-TRAN-CFP2-LR4	100 GE CFP2 transceivers, long range, over single mode fiber, for all systems with CFP2 slots.
40 GE QSFP+ Transceivers, Short Range	FG-TRAN-QSFP+SR	40 GE QSFP+ transceivers, short range for all systems with QSFP+ slots.
40 GE QSFP+ Transceivers, Long Range	FG-TRAN-QSFP+LR	40 GE QSFP+ transceivers, long range for all systems with QSFP+ slots.
10 GE SFP+ Transceiver Module, Short Range	FG-TRAN-SFP+SR	10 GE SFP+ transceiver module, short range for all systems with SFP+ and SFP/SFP+ slots.
10 GE SFP+ Transceiver Module, Long Range	FG-TRAN-SFP+LR	10 GE SFP+ transceiver module, long range for all systems with SFP+ and SFP/SFP+ slots.



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